35. (NEW) The device of claim 32, wherein a notification is a primitive.

36. (NEW) The device of claim 28, wherein the lower protocol layer is a medium access control sub-layer of a data link layer.

37. (NEW) The device of claim 28, wherein the upper protocol layer is a radio link control sub-layer of a data link layer.

38. (NEW) The device of claim 28, wherein the transmission is performed on a channel that can be shared by at least one of a plurality of several users and data flows.

REMARKS

It is respectfully submitted that the amendments made to the claims herein are neither being presented nor made in response to the citation of any prior art known to the Applicant or the Applicant's attorneys. These claim amendments are further not made for any reason related to any statutory requirements for patentability. These claim amendments are made solely to more completely claim that to which the Applicant is entitled. Applicant's invention should only be considered limited by the claims as they now exist and the equivalents thereof. It is not the Applicant's intent to narrow any claim element by the amendments made herein. It is submitted that no new matter has been added. A marked-up copy of all pending claims after the amendments made herein is attached to this Preliminary Amendment as Exhibit A. A marked-up

copy of all amendments to the specification is attached to this Preliminary Amendment as Exhibit B.

In view of the foregoing, Applicant respectfully requests the thorough and complete examination of this application and earnestly solicits an early notice of allowance.

Respectfully submitted,

JENKENS & GILCHRIST,
A Professional Corporation

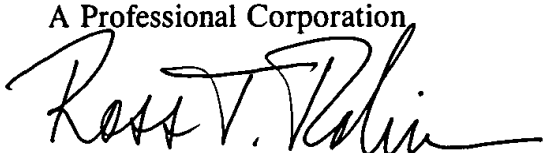

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Exhibit A

1. (AMENDED) [Method] A method [for] of improving [the]transmission efficiency in a communication system with a layered protocol stack, wherein data packets are processed on an upper protocol layer;[and] [said] the processing is controlled according to at least one timer of the upper protocol layer;[, wherein] the data packets are forwarded to a lower protocol layer for transmission,[wherein] [said] the transmission is controlled by the lower protocol layer, and the transmission is performed with variable channel access delays, the method comprising[the steps of]:

[- detection of] detecting the start of a transmission by the lower protocol layer;[,]

[- notification of] notifying the upper protocol layer by the lower protocol layer when a transmission is started[,]; and

[- synchronization of]synchronizing at least one timer of the upper protocol layer according to the notification.

2. (AMENDED) [Method] The method [according to] of claim 1, wherein the timer models a round trip time or a back-off time.

3. (AMENDED) [Method] A method [for] of improving the transmission efficiency in a communication system with a layered protocol stack, wherein data packets are processed on an upper protocol layer and are forwarded to a lower protocol layer controlling the transmission, [wherein]transmissions are performed with a channel access delay, and[wherein] at least one of [said] the layers performs a scheduling of data packets for the transmission, comprising:[characterized in that]

[- a]scheduling of first data packets for transmission[is performed,];

[-]detecting a channel access delay [is detected]on the lower layer[,];

[-]performing a check is performed [whether]to determine whether additional data packets are ready for forwarding to the lower layer at or before the end of the channel access delay[,];

[-]performing a further scheduling of the first and additional data packets[is performed,]; and

[-]transmitting the data packets[are transmitted] according to the further scheduling.

4. (AMENDED) [Method] The method [according to] of claim 3, wherein the scheduling is performed on the upper layer and a notification of the channel access delay by the lower layer initiates the further scheduling.

5. (AMENDED) [Method] The method [according to] of claim 3, wherein [a]at least one scheduling is performed on the lower layer.

6. (AMENDED) [Method] The method [according to] of [any preceding] claim 3, wherein a notification is sent at the start of a transmission or at the end of a delay.

7. (AMENDED) [Method] The method [according to] of [any preceding] claim 3, wherein a total channel access delay comprises at least two separate components and a notification is sent between the at least two separate components.

8. (AMENDED) [Method] The method [according to] of claim 7, wherein the channel access delay includes a component of arbitrary length and at least one of a notification [and/or] and a scheduling is performed before the[arbitrary delay] component of arbitrary length.

9. (AMENDED) [Method] The method [according to] of [any preceding]claim 3, wherein a scheduling process is finished immediately before the scheduled data packets are transmitted.

10. (AMENDED) [Method] The method [according to] of [any preceding] claim 3, wherein a notification is a primitive.

11. (AMENDED) [Method] The method [according to] of [any preceding]claim 3, wherein the lower protocol layer is a medium access control sub-layer of a data link layer.

12. (AMENDED) [Method] The method [according to] of [any preceding]claim 3, wherein the upper protocol layer is a radio link control sub-layer of a data link layer.

13. (AMENDED) [Method] The method [according to] of [any preceding]claim 3, wherein the transmission is performed on a channel [which]that can be shared by at least one of a plurality of several users [and/or]and data flows.

17. (NEW) A device in a communication system, the communication system having a layered protocol stack, wherein data packets are processed on an upper protocol layer; the processing is controlled according to at least one timer of the upper protocol layer; the data packets are forwarded to a lower protocol layer for transmission, the transmission is controlled by the lower protocol layer, and the transmission is performed with variable channel access delays, the device comprising:

means for detecting the start of a transmission by the lower protocol layer;

means for notifying the upper protocol layer by the lower protocol layer when a transmission is started; and

means for synchronizing at least one timer of the upper protocol layer according to the notification.

18. (NEW) The device of claim 17, comprising at least one of a user equipment and a network node.

19. (NEW) The device of claim 17, wherein the at least one timer is adapted to model at least one of a round trip time and a back-off time.

20. (NEW) The method of claim 1, wherein a notification is sent at the start of a transmission or at the end of a delay.

21. (NEW) The method of claim 1, wherein a total channel access delay comprises at least two separate components and a notification is sent between the at least two separate components.

22. (NEW) The method of claim 21, wherein the channel access delay includes a component of arbitrary length and at least one of a notification and a scheduling is performed before the component of arbitrary length.

23. (NEW) The method of claim 1, wherein a scheduling process is finished immediately before the scheduled data packets are transmitted.

24. (NEW) The method of claim 1, wherein a notification is a primitive.

25. (NEW) The method of claim 1, wherein the lower protocol layer is a medium access control sub-layer of a data link layer.

26. (NEW) The method of claim 1, wherein the upper protocol layer is a radio link control sub-layer of a data link layer.

27. (NEW) The method of claim 1, wherein the transmission is performed on a channel that can be shared by at least one of a plurality of several users and data flows.

28. (NEW) A device for improving the transmission efficiency in a communication system with a layered protocol stack, wherein data packets are processed on an upper protocol layer and are forwarded to a lower protocol layer controlling the transmission, transmissions are performed with a channel access delay, and at least one of the layers performs a scheduling of data packets for the transmission, the device comprising:

means for scheduling of first data packets for transmission;

means for detecting a channel access delay on the lower layer;

means for performing a check is performed to determine whether additional data packets are ready for forwarding to the lower layer at or before the end of the channel access delay;

means for performing a further scheduling of the first and additional data packets; and means for transmitting the data packets according to the further scheduling.

29. (NEW) The device of claim 28, wherein the scheduling is performed on the upper layer and a notification of the channel access delay by the lower layer initiates the further scheduling.

30. (NEW) The device of claim 28, wherein at least one scheduling is performed on the lower layer.

31. (NEW) The device of claim 28, wherein a notification is sent at the start of a transmission or at the end of a delay.

32. (NEW) The device of claim 28, wherein a total channel access delay comprises at least two separate components and a notification is sent between the at least two separate components.

33. (NEW) The device of claim 32, wherein the channel access delay includes a component of arbitrary length and at least one of a notification and a scheduling is performed before the component of arbitrary length.

34. (NEW) The device of claim 32, wherein a scheduling process is finished immediately before the scheduled data packets are transmitted.

35. (NEW) The device of claim 32, wherein a notification is a primitive.

36. (NEW) The device of claim 28, wherein the lower protocol layer is a medium access control sub-layer of a data link layer.

37. (NEW) The device of claim 28, wherein the upper protocol layer is a radio link control sub-layer of a data link layer.

38. (NEW) The device of claim 28, wherein the transmission is performed on a channel that can be shared by at least one of a plurality of several users and data flows.

Exhibit B

Please replace the paragraph at p. 3, ln.22 with the following paragraph:
Summary [and description] of the invention

Please delete the paragraph at p. 3, ln. 26 - p. 4, ln. 2.

Please replace the paragraph at p. 4, lns. 3-12 with the following paragraph:
[The proposed] A method is performed in a communication system with a layered protocol stack. Data packets are processed on an upper protocol layer and said processing is performed according to at least one timer of the upper protocol layer. The data packets are forwarded to a lower protocol layer for transmission on a channel, wherein said transmission is controlled by the lower protocol layer. Additionally, the protocol stack can comprise one or more further layers, e.g. a physical layer below the lower layer, the physical layer executing the transmissions, or a layer executing applications. The transmission is performed with variable channel access delays which are caused for example by the control procedures or external conditions.

Please replace the paragraph at p. 4, lns. 13-23 with the following paragraph:
[According to the invention, the] The start of a transmission is detected by the lower protocol layer. Generally an event, especially the sending of a primitive from the lower protocol layer to a physical layer, initiates the transmission on the channel. If the period of time between event and transmission is defined, it is often preferable to perform the detection of said event. When the start of the transmission is detected, the upper protocol layer is notified by the lower protocol layer of the starting time. At least one timer of the upper protocol layer is synchronized according to the notification. Especially, the notification can be sent at the start of the transmission and the timers can be started when the notification is received. If the transmission is started with an offset from a detected event, timers can be corrected by the offset.

Please replace the paragraph at p. 4, lns. 24-27 with the following paragraph:
[The proposed method allows to set timers] Timers can be set according to actual transmission times and [remove] the influence of variable channel access delays removed. In this way the precision of the timing and the control of the delays is significantly enhanced and the efficiency of transmissions can be considerably improved.

Please replace the paragraph at p. 8, lns. 10-15 with the following paragraph:
[According to the invention, a] A device in a communication system is adapted to perform at least one of the above methods. The device is for example a network node like a radio base station for providing wireless access of user equipment to the communication system or a controller of a base station. The device can also be a user equipment like a mobile phone, a personal digital assistant or a laptop computer.